AMENDMENT TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently amended) A system comprising:

    a hardware component; and

    a firmware component coupled to said hardware component and able to establish a noise level in a chipa noise floor register to store a noise floor value of a chip;

    a noise event counter to count a number of noise events in which a direct-current offset value of said chip is bigger than said noise floor value; and

    an approximator to update said noise floor register with an approximated noise floor value by performing the following operations one or more times:

    causing said noise event counter to count said noise events; and

    updating said noise floor value based on the number of said noise events.

2. (Currently amended) A system according to claim 1, wherein said noise level is comprises a noise level selected from the group consisting of a noise level of a receiver of said chip, and a noise level of a transmitter of said chip.

3. (Currently amended) A system according to claim 1, wherein said noise level is a noise level of a transmitter of said chip approximator is able to cause said noise event counter to count said noise events during at least two different time periods.

4. (Currently amended) A system according to claim 1, wherein said hardware comprises comprising:

    a noise register to store a noise value;

a noise register updater to update said noise value based on a comparison between said noise value and said direct-current offset value;

a fine tuner to adjust the approximated noise floor value based on a plurality of noise values retrieved from said noise register.

at least one digital to analog converter;

at least one comparator able to receive output of said converter;

at least one register able to be read by said firmware; and

at least one register able to be written to by said firmware.

5. (Currently amended) A system according to claim 14, wherein said firmware comprises fine tuner comprises:

a noise tracker to retrieve said plurality of noise values from said noise register at a plurality of time intervals, respectively; and

an evaluator to adjust said noise floor value based on said plurality of noise values.

an approximator; and

a fine tuner able to fine tune the approximation of said approximator.

6. (Currently amended) A method comprising

approximating a first noise level in an individual chip; and

fine tuning said first noise level to produce a second noise level.

storing a noise floor value of a chip; and

determining an approximated noise floor value by performing the following operations one or more times:

counting a number of noise events in which a direct-current offset value of a chip is bigger than said noise floor value; and

updating said noise floor value based on the number of said noise events.

7. **(Currently amended)** A method according to claim 6 comprising, ~~wherein said approximating comprises:~~

~~determining said first noise level according to a hardware result.~~storing a noise value;

updating said noise value based on a comparison between said noise value and said direct-current offset value;

fine tuning the approximated noise floor value based on a plurality of retrieved noise values.

8. **(Currently amended)** A method according to claim ~~6~~7, wherein said fine tuning comprises:

~~determining said second noise level according to a hardware result.~~

retrieving said plurality of noise values at a plurality of time intervals, respectively; and

adjusting said noise floor value based on said plurality of noise values.

9. **(Currently amended)** A method according to claim 6, wherein ~~said approximating comprises:~~ determining said approximated noise floor value comprises counting said noise events during at least two different time periods.

~~reading from a noise event counter register; and~~

~~writing to a noise floor register.~~

10. **(Cancelled)**

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Currently amended) A system comprising:

a card; and

a chip attached to said card, said chip comprising:

a noise floor register to store a noise floor value of said chip;

a noise event counter to count a number of noise events in which a direct-current offset value of said chip is bigger than said noise floor value; and

an approximator to update said noise floor register with an approximated noise floor value by performing the following operations one or more times:

causing said noise event counter to count said noise events; and

updating said noise floor value based on the number of said noise events.

~~a hardware component; and~~

~~a firmware component coupled to said hardware component and able to establish a noise level in said chip.~~

15. (Currently amended) A system according to claim 14 comprising:~~, wherein said noise level is a noise level of a receiver of said chip.~~

a noise register to store a noise value;

a noise register updater to update said noise value based on a comparison between said noise value and said direct-current offset value;

a fine tuner to adjust the approximated noise floor value based on a plurality of noise values retrieved from said noise register.

16. **(Currently amended)** A system according to claim ~~14~~15,~~wherein said noise level~~

~~is a noise level of a transmitter of said chip.~~ fine tuner comprises:

a noise tracker to retrieve said plurality of noise values from said noise register

at a plurality of time intervals, respectively; and

an evaluator to adjust said noise floor value based on said plurality of noise

values.

17. **(Currently amended)** A home phone networking system comprising:

two or more computers, at least one of said computers ~~each~~ having a chip

comprising:

a noise floor register to store a noise floor value of said chip;

a noise event counter to count a number of noise events in which a direct-

current offset value of said chip is bigger than said noise floor value; and

an approximator to update said noise floor register with an approximated noise

floor value by performing the following operations one or more times:

causing said noise event counter to count said noise events; and

updating said noise floor value based on the number of said noise events.

~~a hardware component; and~~

~~a firmware component coupled to said hardware component and able to~~

~~establish a noise level in said chip.~~

18. **(Original)** A system according to claim 17, further comprising:

one or more peripheral devices coupled to at least one of said computers.